

BEFORE THE DEPARTMENT OF LABOR AND INDUSTRY
STATE OF MONTANA

In the matter of the adoption of) NOTICE OF ADOPTION
New Rules I through VII, and the) AND REPEAL
repeal of ARM 8.15.302, all)
pertaining to boilers, terminology,)
licensure, examinations,)
responsibility of licensees, and)
training)

TO: All Concerned Persons

1. On October 21, 2004, the Department of Labor and Industry published MAR Notice No. 8-15-4 regarding the public hearing on the proposed adoption and repeal of the above-stated rules relating to boilers, terminology, licensure, examinations, responsibility of licensees, and training, at page 2492 of the 2004 Montana Administrative Register, issue no. 20.

2. On November 12, 2004, at 10:00 a.m., a public hearing was conducted in Helena, Montana, and numerous members of the public spoke at the hearing. In addition, a number of written comments were received prior to the closing of the comment period.

3. The Department has thoroughly considered all of the comments made. A summary of the comments received and the Department's responses are as follows:

COMMENT 1: Comments were received asking for a better definition of the term "operating" than that in New Rule I(6) because the definition proposed is unclear.

RESPONSE 1: The Department agrees with the commenters and will amend the definition accordingly.

COMMENT 2: Several comments were made objecting to the requirement that power boilers be attended whenever being operated, as required by New Rule VI(2).

RESPONSE 2: The requirement for continual attendance applies only to the situation where a power boiler is being operated while the water feed is shut off, and the boiler is being forced to its maximum capacity. If either one of those conditions is not present (i.e., the water feed is not shut off, or the boiler is not being forced to its maximum capacity), then continual attendance by the operator is not required by New Rule VI(2).

COMMENT 3: Numerous comments were received regarding New Rule VI(3) which requires an operator to personally check the operation of a power boiler at a minimum of every 120 minutes.

Several commenters stated that many employers cannot afford to hire licensed operating engineers to personally check the operation of an automatically fired power boiler at least once every two hours.

RESPONSE 3: New Rule VI(3) only applies to power boilers as defined. The Department understands there is some confusion on the definition of "power boiler". ARM 24.301.711 defines the term "power boiler". The Department has now added an explicit definition for power boiler to New Rule I - Use of Terminology. Also, the catchphrase for New Rule I - Use of Terminology is being changed to "Definitions" to be consistent with other department definition rules.

The Department will amend New Rule VI(3) to clarify that when a power boiler is being manually operated, the boiler must be checked at no more than 120 minute intervals, or in accordance with the boiler manufacturer's requirements specified in AMSE CSD 1. The Department will also amend the rule to specify that other boilers (those not meeting the definition of a "power boiler") are to be checked as required by the manufacturer as specified in AMSE CSD, or whenever the boiler is being manually operated.

COMMENT 4: Several commenters objected to the approval of any training standards in New Rule VII that would provide lesser training and experience than already provided by existing state-approved training programs.

RESPONSE 4: The Department does not intend to lower the training standards that have been developed by various employers or organizations and approved by the Department. The legislation that amended 50-74-304(6)(a), MCA, did not include any requirements for the minimum amount of hours for training courses. The Department will clarify the rule by specifying that training courses for a low pressure license or a third class license must have a minimum of 30 hours of classroom and shop time. The requirement for those licenses is "completion of a training course acceptable to the department", plus 40 hours of experience. The statute does not allow for training courses as an alternative to the requirements for first or second class operating engineer licenses, nor has the Department proposed any such action.

COMMENT 5: Numerous comments were received regarding New Rule V(4) which would require that at the time of license renewal, operators inform the department in writing or by online renewal on the forms provided, which boiler(s), identified by the Montana Boiler Number (MTB#) and location, the operator is responsible for operating and/or monitoring. Those commenters all felt it would be difficult and burdensome for licensees to do that.

RESPONSE 5: The Department has reviewed New Rule V and agrees that it may be too burdensome. As a consequence, (4) will be removed from New Rule V and the remainder of the rule will be adopted and its remaining provisions renumbered.

COMMENT 6: Comments were received stating that New Rule V(5) was burdensome because it required a licensed operator to indicate in writing or by online renewal the name(s) of any person(s) they are currently training. One commenter suggested that trainees, not the licensee, should be required to keep a training log, similar to those used by individuals learning to pilot an airplane.

RESPONSE 6: The Department notes that the licensed operator is the responsible operator for the boiler(s), and is held responsible for any person(s) the licensee is training. Additionally, the Boiler Experience Verification Affidavit on the application is to be filled out by the licensed operator (not the trainee), and sworn to before a notary public. The Department relies on the sworn statement of the existing licensee as the best evidence available to verify that the applicant has obtained the required amount of training. The Department believes that it is necessary to adopt the provisions of New Rule V(5) as proposed.

COMMENT 7: An employee of the Harford Steam Boiler Insurance Company submitted data from the National Board of Boiler Pressure Inspectors (the 1992-2002 incident report) for the Department's review. He noted that twice as many fatalities were caused by hot water heater and boiler explosions than were caused by steam heating boilers.

RESPONSE 7: The Department acknowledges receipt of the data and notes the points made.

COMMENT 8: One person commented on the provisions of New Rule I(1)(b)(i), that the Department may require the boiler owner to provide appropriate verification from the power supplier, which establishes the BTU per hour or horsepower per hour rate at which the boiler is being fired, as applicable. He was not sure how that could be accomplished, because without an efficiency factor, the amount of heat input does not necessarily equal the amount of power produced.

RESPONSE 8: The commenter is correct that actual work output of a boiler system is less than the energy input for the system. It is the intent of the Department that the nominal operating output be identified in order to determine what class of license is required to operate the boiler system. The formula for determining the nominal operating output figures is: $\text{BTU hr input} / 1\text{hp} / 34,000 \text{ BTU hr input} = \text{hp}$. The Department believes that the nominal operating output calculation is the most practical way of estimating the actual output of an operating boiler.

COMMENT 9: The same person also commented on an issue involving whether the training and experience a nuclear-power-trained engineer gained in the military would qualify as appropriate training and experience for Montana licensing purposes.

RESPONSE 9: The Department believes proposed New Rule III allows the Department to consider such experience and training on a case-by-case basis. The Department reviews and considers military experience under 50-74-305(2), MCA currently and will continue to evaluate military experience based on the authority provided in the statute.

COMMENT 10: Representative Jim Keane, who was the prime sponsor of House Bill 525 during the 2003 Legislature, expressed concern whether the proposed New Rules would change the first class boiler license requirements.

RESPONSE 10: The New Rules do not in any way change the requirements for a first class license.

COMMENT 11: Rep. Keane also stated his opposition to any reduction in the 40 hours of operating experience for low pressure or third class licenses.

RESPONSE 11: As noted in Response 4, the statutory minimum of 40 hours of experience is in addition to whatever time is spent in an approved training course.

COMMENT 12: An individual questioned whether the Department was creating a new class of licensure, the limited low pressure operating engineer, and questioned whether the Department had the legal authority to do so.

RESPONSE 12: After further review of 50-74-304 and 50-74-305, MCA, the Department concludes that there is no clearly expressed statutory authority for it to provide by rule for a sub-class of license. The New Rules will be amended to eliminate the questioned class of license, "limited low pressure operating engineer".

COMMENT 13: A commenter expressed frustration that he was unable to deliver his comments using the e-mail address or the fax number listed in the Notice of Public Hearing and suggested that the comment period be extended until those problems were corrected.

RESPONSE 13: The Department regrets that the commenter experienced the difficulties he described. The Department checked both the e-mail address listed, dlibsdboi@state.mt.us, and the fax number listed, (406) 841-2305, as soon as it was aware someone was having difficulty with access. The Department found (and promptly fixed) a technical glitch in

the e-mail system. The Department found the fax number to be working. The Department notes that it received comments from other persons via e-mail and by fax during the comment period. The Department concludes that the difficulties the commenter experienced were isolated incidents, and do not justify an extension of the comment period.

4. After consideration of all comments received, the Department adopts New Rules II (24.122.501) and IV (24.122.510) exactly as proposed, and adopts New Rules I (24.122.301), III (24.122.505), V (24.122.515), VI (24.122.410) and VII (24.122.405) as proposed but with the following changes, stricken matter interlined, new matter underlined:

NEW RULE I (24.122.301) USE OF TERMINOLOGY DEFINITIONS

For the purposes of this chapter, the following ~~terminology is used~~ definitions apply:

(1) through (3) remain as proposed.

~~(4) "Limited low pressure operator" means a person who has been issued a boiler operating engineer's license specifically authorizing the monitoring of low pressure hot water heating boilers and hot water supply boilers only.~~

(5) remains the same, but is renumbered (4).

~~(6) (5) "Operating" a power boiler or steam engine means the manual operating and monitoring of an automatically fired power boiler or steam engine, which requires the operator to be present while the boiler is fired. For purposes of this chapter, "operating" does not include monitoring an automatically fired steam heating boiler, provided that no operations are performed upon the boiler other than maintenance and emergency shut down in alarm situations.~~

(6) "Power boiler" means a boiler in which steam or other vapor is generated at a pressure of more than 15 pounds per square inch gauge pressure (psig).

(7) Additional definitions related to boiler operators are in building code rules found at ARM 24.301.711. The department incorporates by reference the definitions contained in the September 30, 2004, version of ARM 24.301.711, which include the following terms:

(a) boiler;

(b) high temperature water boiler;

(c) hot water heating boiler;

~~(d) power boiler;~~

(e) through (k) remain the same, but are renumbered (d) through (j).

AUTH: 50-74-101, MCA

IMP: 50-74-101, MCA

NEW RULE III (24.122.505) APPLICATION FOR LICENSURE

(1) through (3) remain as proposed.

~~(4) Applicants may apply for a limited low pressure boiler operating engineer's license which limits them to low~~

~~pressure hot water heating boilers and hot water supply boilers only. To qualify for a low pressure boiler operating engineer's license for operation of both steam and hot water boilers, applicants must pass both the steam and hot water portions of the low pressure operator examination.~~

(5) remains the same, but is renumbered (4).

AUTH: 50-74-101, MCA

IMP: 50-74-302, 50-74-303, 50-74-304, 50-74-305, 50-74-307, 50-74-308, MCA

NEW RULE V (24.122.515) RENEWAL OF LICENSE (1) through (3) remain as proposed.

~~(4) At the time of license renewal, operators shall inform the department, in writing or by online renewal on the forms provided, which boiler(s), identified by Montana boiler number (MTB#) and location, the operator is responsible for operating and/or monitoring.~~

~~(5)~~(4) At the time of license renewal, operators shall inform the department, in writing or by online renewal on the forms provided, of the name(s) of any person(s) currently being trained to operate and/or monitor the boiler(s) ~~listed in (4).~~

AUTH: 50-74-101, MCA

IMP: 50-74-313, MCA

NEW RULE VI (24.122.410) RESPONSIBILITY OF LICENSEE

(1) and (2) remain as proposed.

(3) The operator shall personally check the operation of a power boiler, the necessary auxiliaries, and the water level in the boiler at such intervals as are necessary to ensure safe operation of the boiler. In no case when the power boiler is being manually operated may this interval exceed 120 minutes-, or the requirements of the boiler manufacturer as set forth in ASME CSD 1, which ever period is shorter.

(4) The operator of any boiler, other than a power boiler, whenever the boiler is being manually operated, shall personally check the operation of such boiler in intervals established by the requirements of the boiler manufacturer as set forth in ASME CSD 1.

(4) through (6) remain the same, but are renumbered (5) through (7).

AUTH: 50-74-101, MCA

IMP: 50-74-106, 50-74-210, 50-74-214, MCA

NEW RULE VII (24.122.405) APPROVAL OF TRAINING COURSES

(1) remains as proposed.

(2) Minimum training course hours are as follows:

~~(a) For limited low pressure boiler operating engineers, applicable to the monitoring of low pressure hot water heating and hot water supply boilers only, a minimum of 16 hours, with a minimum of eight hours of classroom training is required.~~

~~(b)~~(a) For all ~~other classes of~~ low pressure and third class boiler operating engineer training courses, a minimum of 30 hours, including classroom instruction and field or shop time is required.

(3) through (3)(d) remain as proposed.

(e) the name of each ~~person~~ licensed operator who will act as an instructor for the course; and

(f) a copy of the instructor's boiler operating engineer's license or other documentation acceptable to the department, which outlines the instructor qualifications to teach the course.

(i) Instructors who are not currently licensed by the state of Montana as a boiler operating engineer ~~with a~~ must have a class of license at least equal to the level of training class being offered and are required to successfully pass the applicable written examination prior to teaching the training course.

(4) through (6) remain as proposed.

AUTH: 50-74-101, MCA

IMP: 50-74-304, MCA

5. The department has repealed ARM 8.15.302 exactly as proposed.

DEPARTMENT OF LABOR AND INDUSTRY
BOILERS, BLASTERS AND CRANES

/s/ MARK CADWALLADER
Mark Cadwallader
Alternate Rule Reviewer

/s/ KEITH KELLY
Keith Kelly, Commissioner
DEPARTMENT OF LABOR & INDUSTRY

Certified to the Secretary of State April 4, 2005